



FY98-99 IT PROJECT PROFILES

The following project profile table provides details about various FY98-99 IT projects. The information furnished includes:

- ▲ platform type,
- ▲ implementation schedules,
- ▲ emerging technologies used,
- ▲ new project resources and associated costs,
- ▲ statutory changes, and
- ▲ public access.

Those agencies and universities able to provide such detail about their FY98-99 IT

projects are listed ***alphabetically*** within the table, with each organization followed by its project profiles.

Please note that information for a particular project reads horizontally across two pages.

- ▲ The headings on all ***left-hand*** pages are: Project Description, Emerging Technology, and Project Type.
- ▲ The headings on all ***right-hand*** pages are: New Hardware, New Software, Telecommunications Impact, New FTEs, Statutory Changes, and Allows Public Access.

New Hardware	New Software	Telecommunication Impact	New FTEs	Statutory Changes	Allows Public Access?
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DEPARTMENT OF ADMINISTRATION

PROJECT 1 — MT PRIME is the acronym for the Montana Project to Reengineer the Information Management Environment. The purpose of the three-phase project is to update, integrate, and enhance the state's "legacy" systems — SBAS, Warrant Writing System, PPP, PAMS and the procurement system.

Too early to identify, but chosen solutions will likely support EDI and EBT.

Application Development	
Hardware	
Software	X
Networking	
Training	
Other	X

Platform Type			Implementation Schedule											
Mainframe	Mid-Tier	PC	FY97	FY98	FY99	FY00	FY01							
Unknown														

PROJECT 2 — Imaging Work Flow Implementation for Teachers' Retirement System.

Imaging and computer telephony integration (CTI).

Application Development	X
Hardware	
Software	
Networking	
Training	
Other	

Platform Type			Implementation Schedule											
Mainframe	Mid-Tier	PC	FY97	FY98	FY99	FY00	FY01							
	X	X												

PROJECT 3 — Automation: Use current and new technologies to computerize operations in the State Treasurer's Office, including bank account reconciliation; manual calculations; and handwritten deposits, transfers, and reports.

Possibly EDI, EBT, and imaging.

Application Development	X
Hardware	
Software	
Networking	
Training	
Other	

Platform Type			Implementation Schedule											
Mainframe	Mid-Tier	PC	FY97	FY98	FY99	FY00	FY01							
	X													

Project Description	Emerging Technology	Project Type
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New Hardware	New Software	Telecommunication Impact	New FTEs	Statutory Changes	Allows Public Access?
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Phase I (and II) will address necessary hardware.	Phase I will identify four options: do nothing; system enhancement or rewrite; or buy a package.	MT PRIME has the potential for significant telecommunications impact.	Unknown	Perhaps. These will be detailed during Phases I and II.	It is likely that public access to procurement information will be improved.
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Estimated Project Costs (in dollars)					
Hardware	Software	Contracted Services	FTEs	Assoc. Training	TOTAL

High-speed scanner; Pentium workstation/21" monitor; 17" monitors for PCs; disk drive storage; CD-ROM tower.	Windows-based document imaging and retrieval software pkg./relational database for a mid-tier.	TRS bldg. is being rewired for 16 MB or higher token-ring speed for image retrieval/storage.	None (1 FTE shared)	N/A	Public info. documents will be printed on demand; private info. will be masked.
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Estimated Project Costs (in dollars)					
Hardware	Software	Contracted Services	FTEs	Assoc. Training	TOTAL
\$35,000	\$40,000	\$3,000		\$4,400	\$82,400

Workstations (to be purchased FY97).	Oracle.	Two or three new data connections (to be implemented FY97).	None	Unknown at this time.	N/A
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Estimated Project Costs (in dollars)					
Hardware	Software	Contracted Services	FTEs	Assoc. Training	TOTAL
Unknown	Unknown	\$10,000	Unknown	\$500	

Project Description	Emerging Technology	Project Type
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DEPARTMENT OF AGRICULTURE

PROJECT 1 — Continue upgrade of computer hardware to the minimum state standard for a desktop operating system.									Application Development	
									Hardware	X
									Software	X
									Networking	X
									Training	
									Other	
Platform Type			Implementation Schedule							
Mainframe	Mid-Tier	PC	FY97	FY98	FY99	FY00	FY01			
		X								
PROJECT 2 — Begin the systems analysis for the rewrite of existing application code for Oracle.								All applications will be considered with enterprise implications for the department.	Application Development	X
									Hardware	
									Software	X
									Networking	X
									Training	
									Other	
Platform Type			Implementation Schedule							
Mainframe	Mid-Tier	PC	FY97	FY98	FY99	FY00	FY01			
	X	X								
PROJECT 3 — Conversion of the desktop operating system to the state standard.								None	Application Development	
									Hardware	
									Software	X
									Networking	X
									Training	
									Other	
Platform Type			Implementation Schedule							
Mainframe	Mid-Tier	PC	FY97	FY98	FY99	FY00	FY01			
		X								

New Hardware	New Software	Telecommunication Impact	New FTEs	Statutory Changes	Allows Public Access?
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PROJECT 4 — Replacement of all field-office computer equipment. Installation of state-standard operating system and application software.

None

Application Development

Hardware

X

Software

X

Networking

X

Training

Other

Platform Type			Implementation Schedule															
Mainframe	Mid-Tier	PC	FY97	FY98	FY99	FY00	FY01											
		X																

Project Description	Emerging Technology	Project Type
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The state standard PC is a Pentium desktop computer.	DOS 6.2; Windows 3.11; NetWare 4.X to support the state standard software.	None	None	None	N/A
Estimated Project Costs (in dollars)					
Hardware	Software	Contracted Services	FTEs	Assoc. Training	TOTAL
\$223,000	\$14,000				\$237,000

The system will be supported by a dedicated Oracle database server.	Oracle Developer 2000 across the NetWare 4.X, in a Windows environment.	None	1 (or through contract)	None	If so, possible access to the state intranet and the Internet will be considered.
Estimated Project Costs (in dollars)					
Hardware	Software	Contracted Services	FTEs	Assoc. Training	TOTAL
\$40,000	\$5,100	\$80,628		\$11,000	\$136,728

The state minimum standard.	Whatever is the state standard operating system at the time.	None	None	None	N/A
Estimated Project Costs (in dollars)					
Hardware	Software	Contracted Services	FTEs	Assoc. Training	TOTAL
	\$17,800				\$17,800

The state standard PC is a Pentium desktop computer.	DOS 6.2, Windows 3.11, and NetWare 4.X to support the state standard software.	None	None	None	N/A
Estimated Project Costs (in dollars)					
Hardware	Software	Contracted Services	FTEs	Assoc. Training	TOTAL

New Hardware	New Software	Telecommunication Impact	New FTEs	Statutory Changes	Allows Public Access?
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\$48,000	\$4,400			\$4,000	\$56,400
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<u>PROJECT 5</u> — Begin an evaluation process regarding developing an imaging system for the department.										None	Application Development		
											Hardware		X
											Software		X
											Networking		X
Platform Type			Implementation Schedule								Training		
Mainframe	Mid-Tier	PC	FY97	FY98	FY99	FY00	FY01				Other		
		X											

Project Description	Emerging Technology	Project Type
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The state standard PC is a Pentium desktop computer.	DOS 6.2, Windows 3.11, and NetWare 4.X to support the state standard software.	None	None	None	N/A
Estimated Project Costs (in dollars)					
Hardware	Software	Contracted Services	FTEs	Assoc. Training	TOTAL

New Hardware	New Software	Telecommunication Impact	New FTEs	Statutory Changes	Allows Public Access?
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DEPARTMENT OF CORRECTIONS

PROJECT 1 — ACIS enhancements are planned to include the addition of a number of modules that will improve the quality and timeliness of the information the department is able to provide the legislature, other state or local entities, contractors, the public, and internal staff.

Imaging, document mgt., digital photos/fingerprints, and bar coding.

Application Development

X

Hardware

Software

Networking

Training

Other

Platform Type			Implementation Schedule							
Mainframe	Mid-Tier	PC	FY97	FY98	FY99	FY00	FY01			
	X	X								

PROJECT 2 — Expansion of the department's wide-area network to include the District Probation and Parole Offices, the new boot camp, and the regional prisons. A campus LAN is planned for the Montana State Prison and Pine Hills School to link all of the major business activities at each location.

None

Application Development

Hardware

Software

Networking

Training

Other

Platform Type			Implementation Schedule							
Mainframe	Mid-Tier	PC	FY97	FY98	FY99	FY00	FY01			
		X								

PROJECT 3 — The department plans to acquire the hardware and software needed to begin to implement state standards, including Oracle as its database, SummitNet as its communications infrastructure, and ITAC's minimum standards for desktop technology.

None

Application Development

Hardware

Software

Networking

Training

Other

Platform Type			Implementation Schedule							
Mainframe	Mid-Tier	PC	FY97	FY98	FY99	FY00	FY01			
	X	X								

Project Description	Emerging Technology	Project Type
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Optical storage for existing AS/400, optical scanning equip., bar code reading equip., and digital cameras.	Third-party software for imaging, document mgt., and digital fingerprinting; new ACIS module.	Data requirements for increased on-line communications; imaging may impact network bandwidth.	1 (Grade 16 proj. manager)	None	Will increase access to information.
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Estimated Project Costs (in dollars)					
Hardware	Software	Contracted Services	FTEs	Assoc. Training	TOTAL
\$684,777	\$391,500	\$610,000	\$98,532	\$135,000	\$1,970,729 ^A

Desktop PCs, network file servers, shared printers.	Novell NetWare.	Connectivity for offices; may impact network bandwidth requirements.	7.5 (4.5 directly assoc.)	None	Will increase access to information.
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Estimated Project Costs (in dollars)					
Hardware	Software	Contracted Services	FTEs	Assoc. Training	TOTAL
\$756,534	\$42,630	\$0	\$626,126	Inc. in Project 1.	\$2,018,958 ^B

4 developers workstations, 2 Oracle database file servers.	5 Oracle CDE 2000 developer licenses (one would be installed on an existing PC).	None	None	None	N/A
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Estimated Project Costs (in dollars)					
Hardware	Software	Contracted Services	FTEs	Assoc. Training	TOTAL
\$76,248	\$10,000	\$0	\$0	\$12,500	\$98,748

^A This total includes \$50,920 for assistance to the Pre-Release Center and Regional Prisons.

^B This total includes \$376,500 for cabling costs at Montana State Prison, the Boot Camp, and Pine Hills School; \$199,152 for ISD connectivity charges; \$10,016 for telephone charges (modems); and \$8,000 for furniture.

New Hardware	New Software	Telecommunication Impact	New FTEs	Statutory Changes	Allows Public Access?
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DEPARTMENT OF ENVIRONMENTAL QUALITY (DEQ)

PROJECT 1 – LAN workstation operating system change. Windows NT and Windows 95 are being considered. This three- to four-year project (depending on funding availability) will involve upgrading workstation software, server software, network drivers, and hardware.

32-bit operating system with Unix/NetWare capabilities.

Application Development

Hardware

Software

Networking

Training

Other

X

Platform Type

Implementation Schedule

Mainframe

Mid-Tier

PC

FY97

FY98

FY99

FY00

FY01

X

PROJECT 2 – Database coordination. The DEQ's Information Services Bureau (ISB) plans to coordinate the several databases in the department and develop plans and procedures to convert these systems to Oracle. This project also includes training for department programmer/analysts.

Client/server; Unix/NetWare, data coll., remote dial-in, optical disk storage, db replication.

Application Development

Hardware

Software

Networking

Training

Other

X

X

Platform Type

Implementation Schedule

Mainframe

Mid-Tier

PC

FY97

FY98

FY99

FY00

FY01

X

X

PROJECT 3 – Internet services. This project involves providing increased Internet services in DEQ, which is currently providing Internet e-mail and browsing for staff plus a DEQ home page.

Inter/Intranet, EDI, document management, data collection systems, etc.

Application Development

Hardware

Software

Networking

Training

Other

X

Platform Type

Implementation Schedule

Mainframe

Mid-Tier

PC

FY97

FY98

FY99

FY00

FY01

Unknown

Project Description	Emerging Technology	Project Type
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Upgrades to existing servers (disk storage arrays and increased memory); also inc. dedicated servers.	Unknown at this time.	New data requirements will be internal to DEQ and will involve increased server disk storage.	None	None	May provide enhanced capabilities toward more public access.
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Estimated Project Costs (in dollars)					
Hardware	Software	Contracted Services	FTEs	Assoc. Training	TOTAL
\$96,000	\$219,450	\$179,000	\$0	\$48,000	\$590,450 ^c

Using existing DEC ALPHA (Unix) server as the primary database server; Novell Net-Ware server for dev./testing.	Oracle database engine & dev. toolsets; DEC Unix operating system; various programs, languages, etc.	A voice and modem line plus a data jack/line for new FTE; possible increased SummitNet use.	1	None	Will increase access to information.
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Estimated Project Costs (in dollars)					
Hardware	Software	Contracted Services	FTEs	Assoc. Training	TOTAL
\$11,795	\$16,400	\$157,522	\$154,381	\$70,060	\$410,158

Depends on which approach is used and which outside services providers are selected.	Contemplating WWW services software.	Increased traffic on the DEQ LAN, capitol-complex backbone, and Internet network.	None	None	Will increase public access to info. and provide a means for file transfer.
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Estimated Project Costs (in dollars)					
Hardware	Software	Contracted Services	FTEs	Assoc. Training	TOTAL
		\$50,000			\$50,000

^c This total includes \$48,000 for supplies and materials.

New Hardware	New Software	Telecommunication Impact	New FTEs	Statutory Changes	Allows Public Access?
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DEPARTMENT OF FISH, WILDLIFE AND PARKS (FWP)

PROJECT 1 — Automated licensing statewide (point-of-sale). This project would put point-of-sale technology in all agent locations statewide. Online capture of data should allow for a high degree of database integrity and improve survey practices and enforcement efforts.

Point-of-sale, EFT, LAN dial-up, multimedia kiosks, and proto-col gateways.

Application Development

X

Hardware

X

Software

X

Networking

X

Training

X

Other

Platform Type			Implementation Schedule											
Mainframe	Mid-Tier	PC	FY97	FY98	FY99	FY00	FY01							
Unknown														

PROJECT 2 — Expansion of FWP networks within regional sites and area offices. Enhanced networking is expected to utilize SummitNet for access to state services and additional offerings such as the Internet.

Full SummitNet implementation.

Application Development

Hardware

X

Software

X

Networking

X

Training

X

Other

Platform Type			Implementation Schedule											
Mainframe	Mid-Tier	PC	FY97	FY98	FY99	FY00	FY01							
		X												

Project Description	Emerging Technology	Project Type
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Not finalized. Inc. central "host" site, communications transport infrastructure, and point-of-sale tech. at agents.	System design not yet completed. Oracle is expected to be used for the database engine.	Larger locations will likely use dedicated lines; remote locations will be served best by dial-up.	2 (re-directed)	Unknown at this time.	Via workstations at agent locations.
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Estimated Project Costs (in dollars)					
Hardware	Software	Contracted Services	FTEs	Assoc. Training	TOTAL
\$540,000	\$2,744,000	See "New Software"	redirect	Inc. in contract.	\$6,498,000 ^D

State standard micro-computers attached to the state network.	State standard software applications.	Additional network connections. Maybe central- ized custom systems from regional sites.	None	None	Via FWP employees at regional/area office sites (not really public access).
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Estimated Project Costs (in dollars)					
Hardware	Software	Contracted Services	FTEs	Assoc. Training	TOTAL
					Unknown

^D This total includes the following estimates: \$1,124,000 for communication and \$2,090,000 for system support.

New Hardware	New Software	Telecommunication Impact	New FTEs	Statutory Changes	Allows Public Access?
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GOVERNOR'S OFFICE

PROJECT 1 — Continue first-time implementation of the Montana Integrated Budget System (MIBS). This project was begun during the current biennium, but three major portions will not be implemented until after July 1, 1997 (next biennium). See this organization's IT plan for a description of those portions.

The state's first enterprise-wide Oracle application.

Application Development

X

Hardware

Software

Networking

Training

Other

Platform Type			Implementation Schedule											
Mainframe	Mid-Tier	PC	FY97	FY98	FY99	FY00	FY01							
	X	X												

PROJECT 2 — Continue development of MIBS. We anticipate that MIBS will need modifications to make it work better; the present design was set at a minimal level to achieve rapid implementation. With experience with this new system, and as other state systems are modified, MIBS modifications will be made.

The state's first enterprise-wide Oracle application.

Application Development

X

Hardware

Software

Networking

Training

Other

Platform Type			Implementation Schedule											
Mainframe	Mid-Tier	PC	FY97	FY98	FY99	FY00	FY01							
	X	X												

Project Description	Emerging Technology	Project Type
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The database is the first large application on ISD's new Unix mid-tier database server.	Oracle tables and forms.	N/A	None	None	Dial-up access to summary-level budgetary information.
Estimated Project Costs (in dollars)					
Hardware	Software	Contracted Services	FTEs	Assoc. Training	TOTAL
\$160,000		\$100,000			\$260,000

The database is the first large application on ISD's new Unix mid-tier database server.	Oracle tables and forms.	N/A	None	None	Dial-up access to summary-level budgetary information.
Estimated Project Costs (in dollars)					
Hardware	Software	Contracted Services	FTEs	Assoc. Training	TOTAL
					Inc. in Project 1 costs.

New Hardware	New Software	Telecommunication Impact	New FTEs	Statutory Changes	Allows Public Access?
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MONTANA HISTORICAL SOCIETY

PROJECT 1 — Update and supply new computers to staff requiring more than just a word processor. This project will include networking all of these computers to give users the ability to share Oracle databases, Internet access, and other multitasking functions.

Dial-in access to LANs, and wireless LANs.

Application Development

Hardware

X

Software

Networking

X

Training

X

Other

Platform Type

Implementation Schedule

Mainframe

Mid-Tier

PC

FY97

FY98

FY99

FY00

FY01

X

X

PROJECT 2 — Refine and expand Internet presence through a more sophisticated and interactive web site that will allow individuals to browse titles available in the library and tour our museum.

Application Development

X

Hardware

Software

Networking

Training

Other

Platform Type

Implementation Schedule

Mainframe

Mid-Tier

PC

FY97

FY98

FY99

FY00

FY01

X

X

PROJECT 3 — Acquire on-line status to WLN (Western Library Network cataloging service) for the Library program. This would provide more efficient service and access not only to the library but to Photo Archives and Archives as well. This service is now acquired on a daily basis through the State Library.

Application Development

Hardware

Software

X

Networking

Training

Other

Platform Type

Implementation Schedule

Mainframe

Mid-Tier

PC

FY97

FY98

FY99

FY00

FY01

X

X

PROJECT 4 — Implement a Collection Management System in the Museum Program. The Museum collections are currently cataloged and tracked using a card system that is managed manually. A database sufficient to track more than 40,000 objects, with the capability to search in multiple fields, is needed.

Document management and data collection systems.

Application Development

Project Description	Emerging Technology	Project Type
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Platform Type			Implementation Schedule									
Mainframe	Mid-Tier	PC	FY97	FY98	FY99	FY00	FY01					
	X	X										

Hardware	
Software	X
Networking	
Training	
Other	

New Hardware	New Software	Telecommunication Impact	New FTEs	Statutory Changes	Allows Public Access?
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Will include larger file servers, high-end graphics PCs, drum scanners, touch screens, gateways, etc.	Most projects will involve large database applications that can migrate to an on-line platform.	Installation of voice and data jacks throughout the Society.	None	None	Internet access.
Estimated Project Costs (in dollars)					
Hardware	Software	Contracted Services	FTEs	Assoc. Training	TOTAL
\$155,000	\$27,000	\$40,000	\$0	\$15,000	\$237 k for all 5 proj.

Will include larger file servers, high-end graphics PCs, drum scanners, touch screens, gateways, etc.	Most projects will involve large database applications that can migrate to an on-line platform.		None	None	Internet access.
Estimated Project Costs (in dollars)					
Hardware	Software	Contracted Services	FTEs	Assoc. Training	TOTAL
\$155,000	\$27,000	\$40,000	\$0	\$15,000	\$237 k for all 5 proj.

Will include larger file servers, high-end graphics PCs, drum scanners, touch screens, gateways, etc.	Most projects will involve large database applications that can migrate to an on-line platform.		None	None	Internet access.
Estimated Project Costs (in dollars)					
Hardware	Software	Contracted Services	FTEs	Assoc. Training	TOTAL
\$155,000	\$27,000	\$40,000	\$0	\$15,000	\$237 k for all 5 proj.

Will include larger file servers, high-end graphics PCs, drum scanners, touch screens, gateways, etc.	Most projects will involve large database applications that can migrate to an on-line platform.		None	None	Internet access.
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Project Description	Emerging Technology	Project Type
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Estimated Project Costs (in dollars)					
Hardware	Software	Contracted Services	FTEs	Assoc. Training	TOTAL
\$155,000	\$27,000	\$40,000	\$0	\$15,000	\$237 k for all 5 proj.

New Hardware	New Software	Telecommunication Impact	New FTEs	Statutory Changes	Allows Public Access?
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PROJECT 5 — Adopt scanning methods and CD storage for collections such as Photos. This will enable the public to review and research the entire collection more quickly and efficiently, while not harming the original artifact.

Imaging.

Application Development

Hardware

X

Software

Networking

Training

Other

Platform Type			Implementation Schedule							
Mainframe	Mid-Tier	PC	FY97	FY98	FY99	FY00	FY01			
	X	X								

Project Description	Emerging Technology	Project Type
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Will include larger file servers, high-end graphics PCs, drum scanners, touch screens, gateways, etc.	Most projects will involve large database applications that can migrate to an on-line platform.		None	None	Internet access.
Estimated Project Costs (in dollars)					
Hardware	Software	Contracted Services	FTEs	Assoc. Training	TOTAL
\$155,000	\$27,000	\$40,000	\$0	\$15,000	\$237 k for all 5 proj.

New Hardware	New Software	Telecommunication Impact	New FTEs	Statutory Changes	Allows Public Access?
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DEPARTMENT OF LABOR AND INDUSTRY (DLI)

PROJECT 1 — Reengineer and replace the Unemployment Insurance Benefit Accounting System.

Unknown at this time since the design has not been determined.

Application Development

X

Hardware

Software

Networking

Training

Other

Platform Type

Implementation Schedule

Mainframe	Mid-Tier	PC	FY97	FY98	FY99	FY00	FY01
X							

PROJECT 2 — Continue with the ARPS application using client/server technology and, as SummitNet grows, testing and implementation of the application to all DLI employees.

Client/server technology.

Application Development

X

Hardware

Software

Networking

Training

Other

Platform Type

Implementation Schedule

Mainframe	Mid-Tier	PC	FY97	FY98	FY99	FY00	FY01
	X						

PROJECT 3 — Develop an on-line SBAS application using client/server technology, Oracle, and the mainframe. Communicate with DOT and DOA to reduce redundancy and to ensure data integrity. The goal is to reduce duplication of data throughout the department by sharing information but maintaining security.

Client/server technology.

Application Development

X

Hardware

Software

Networking

Training

Other

Platform Type

Implementation Schedule

Mainframe	Mid-Tier	PC	FY97	FY98	FY99	FY00	FY01
	X						

PROJECT 4 — Develop a client/server based case-tracking system for legal actions using contracted resources. This will automate procedures, ensure information is routed correctly, and reduce paper, thereby moving toward a paperless department.

Client/server technology.

Application Development

X

Project Description	Emerging Technology	Project Type
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														Hardware	
														Software	
														Networking	
														Training	
														Other	
Platform Type			Implementation Schedule												
Mainframe	Mid-Tier	PC	FY97		FY98		FY99		FY00		FY01				
	X														

New Hardware	New Software	Telecommunication Impact	New FTEs	Statutory Changes	Allows Public Access?
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N/A	N/A	N/A	None	None	None
Estimated Project Costs (in dollars)					
Hardware	Software	Contracted Services	FTEs	Assoc. Training	TOTAL
		\$4,000,000			\$4,000,000

N/A	N/A	N/A	None	None	None
Estimated Project Costs (in dollars)					
Hardware	Software	Contracted Services	FTEs	Assoc. Training	TOTAL
					Unavailable

N/A	N/A	N/A	None	None	None
Estimated Project Costs (in dollars)					
Hardware	Software	Contracted Services	FTEs	Assoc. Training	TOTAL
					Unavailable

N/A	N/A	N/A	None	None	None
Estimated Project Costs (in dollars)					
Hardware	Software	Contracted Services	FTEs	Assoc. Training	TOTAL
					Unavailable

Project Description	Emerging Technology	Project Type
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LEGISLATIVE BRANCH (except the Montana Consumer Council)

<u>PROJECT 1</u> — Legislative Automated Workflow System (LAWS). LAWS will automate, integrate, and streamline session functions associated with bill and amendment drafting; bill and amendment tracking and status; bill introduction; committee support; journals; agenda preparation; enrolling and engrossing; etc.								Document management, SGML as the document markup, client/server, workflow.				Application Development				X
												Hardware				
												Software				
												Networking				
												Training				
												Other				
Platform Type			Implementation Schedule													
Mainframe	Mid-Tier	PC	FY97	FY98	FY99	FY00	FY01									
	X															

<u>PROJECT 2</u> — Convert and consolidate branch administrative systems (billing, accounting, payroll, inventory, purchasing, training, publication distribution, etc.). A rewrite of these systems is necessary to consolidate them into one system and to bring them up to current state standards using Oracle database technology.								Oracle Designer/ Developer 2000.				Application Development				X
												Hardware				
												Software				
												Networking				
												Training				
												Other				
Platform Type			Implementation Schedule													
Mainframe	Mid-Tier	PC	FY97	FY98	FY99	FY00	FY01									
	X															

New Hardware	New Software	Telecommunication Impact	New FTEs	Statutory Changes	Allows Public Access?
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Windows NT or Unix server; plan to lease these services from ISD. Windows PCs as the client.	RFP out now. Probably an Oracle database with Powerbuilder or Oracle front end; WP text edit.	More traffic between capitol bldg./ISD. Upgrade 4-MB token ring in capitol bldg. Internet access.	None	None	System data on Internet. Few work-stations in capitol bldg. for public use.
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Estimated Project Costs (in dollars)					
Hardware	Software	Contracted Services	FTEs	Assoc. Training	TOTAL
		\$500,000			\$640,000 ^E

Will use existing network and PCs in branch and lease Oracle server services from ISD.	Oracle Designer/ Developer 2000.	More traffic between capitol bldg./ISD to access leased server. Upgrade 4-MB token ring in capitol.	None	None	None
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Estimated Project Costs (in dollars)					
Hardware	Software	Contracted Services	FTEs	Assoc. Training	TOTAL
		\$90,000			\$105,000 ^F

^E This total includes \$120,000 for ISD server services and \$20,000 for Web server services.

^F This total includes \$15,000 for ISD server services.

Project Description	Emerging Technology	Project Type
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DEPARTMENT OF LIVESTOCK

<u>PROJECT 1</u> — Oracle. All new database systems will be developed using the enterprise standard database software Oracle. Existing systems will be converted as they need major maintenance.								N/A	Application Development	X
									Hardware	
									Software	
									Networking	
Mainframe	Mid-Tier	PC	FY97	FY98	FY99	FY00	FY01		Training	
		X							Other	
<u>PROJECT 2</u> — Year 2000. Implement the year 2000 compliance plan to ensure that systems will continue to operate as required through the turn of the century.								N/A	Application Development	X
									Hardware	
									Software	
									Networking	
Mainframe	Mid-Tier	PC	FY97	FY98	FY99	FY00	FY01		Training	
		X							Other	
<u>PROJECT 3</u> — Rerecord preparation. Prepare for the next rerecord of marks and brands in 2001. New technologies, such as bar coding, electronic commerce, and Internet web sites, will be studied to determine if they would be appropriate, provide cost savings, and increase efficiencies for the process.								Possibly bar coding, scanning, EC, Internet, and voice/data integration.	Application Development	X
									Hardware	X
									Software	X
									Networking	
Mainframe	Mid-Tier	PC	FY97	FY98	FY99	FY00	FY01		Training	
X		X							Other	

New Hardware	New Software	Telecommunication Impact	New FTEs	Statutory Changes	Allows Public Access?
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PROJECT 4 — Remote users. Install necessary hardware and software to allow employees secure access to local-area networks from remote sites. Prepare a plan to include mobile users in the next biennium.

Dial-in access to LANs and mobile computing.

Application Development

Hardware

X

Software

X

Networking

X

Training

X

Other

Platform Type

Implementation Schedule

Mainframe

Mid-Tier

PC

FY97

FY98

FY99

FY00

FY01

X

Project Description	Emerging Technology	Project Type
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An Oracle server and client are required to meet memory, hard disk space, processor, and OS specifications.	Oracle.	A new server will be attached to the network.	None	N/A	N/A
Estimated Project Costs (in dollars)					
Hardware	Software	Contracted Services	FTEs	Assoc. Training	TOTAL
\$15,000	\$2,500			\$6,000	\$23,500

N/A	N/A	N/A	None	N/A	N/A
Estimated Project Costs (in dollars)					
Hardware	Software	Contracted Services	FTEs	Assoc. Training	TOTAL

This project will identify the new system hardware required.	PC platform: Oracle interface for the account-ing portion. MF system: some changes in COBOL.	Methods to link voice and data will be studied for new ways to handle the phone-call volume.	None	N/A	Public access to summary info. re-garding the overall rerecord process.
Estimated Project Costs (in dollars)					
Hardware	Software	Contracted Services	FTEs	Assoc. Training	TOTAL

New hardware installed on the LAN to handle incoming calls from remote users with modems on their PCs.	New LAN software will handle incoming proto-cols; remote users will need new PC software.	New phone lines will be installed and a new connection to the network.	None	N/A	N/A
Estimated Project Costs (in dollars)					
Hardware	Software	Contracted Services	FTEs	Assoc. Training	TOTAL
\$3,500	\$1,000				\$4,500

New Hardware	New Software	Telecommunication Impact	New FTEs	Statutory Changes	Allows Public Access?
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PROJECT 5 — Desktop upgrade. Upgrade desktop operating systems and software to new state standards.			N/A					Application Development				
												X
												X
Platform Type			Implementation Schedule					Training				
Mainframe	Mid-Tier	PC	FY97	FY98	FY99	FY00	FY01	Other				
		X										

Project Description	Emerging Technology	Project Type
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Requirements will depend on the state's future software standards.	The state's future software standard will be determined by ITAC and ITMG.	N/A	None	N/A	N/A
Estimated Project Costs (in dollars)					
Hardware	Software	Contracted Services	FTEs	Assoc. Training	TOTAL
	\$24,000				\$24,000

New Hardware	New Software	Telecommunication Impact	New FTEs	Statutory Changes	Allows Public Access?
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DEPARTMENT OF MILITARY AFFAIRS

PROJECT 1 — Tie the state LAN to the federal LAN.

Platform Type			Implementation Schedule															
Mainframe	Mid-Tier	PC	FY97	FY98	FY99	FY00	FY01											
		X																

Application Development

Hardware

X

Software

X

Networking

X

Training

X

Other

PROJECT 2 — EIS/GIS (Emergency/Geographic Information System) capability for the state emergency operation center. Includes software and databases to support disaster risk management, response, and recovery.

Platform Type			Implementation Schedule															
Mainframe	Mid-Tier	PC	FY97	FY98	FY99	FY00	FY01											
		X																

Application Development

Hardware

X

Software

X

Networking

X

Training

X

Other

Project Description	Emerging Technology	Project Type
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LAN server enhancement.					
Estimated Project Costs (in dollars)					
Hardware	Software	Contracted Services	FTEs	Assoc. Training	TOTAL
\$60,000		\$30,000		\$4,000	\$94,000

Large-screen projection system.	EIS; GIS software (ARCVIEW); database software.				
Estimated Project Costs (in dollars)					
Hardware	Software	Contracted Services	FTEs	Assoc. Training	TOTAL
					Inc. in Project 1 costs.

New Hardware	New Software	Telecommunication Impact	New FTEs	Statutory Changes	Allows Public Access?
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DEPARTMENT OF NATURAL RESOURCES AND CONSERVATION (DNRC)

PROJECT 1 — Migrate from dual multi-user computer systems in the Helena DNRC offices to a single multi-user system. In 1996, executive reorganization brought together the old DNRC and the Department of State Lands. This project involves rewriting in-house software on the VAX to run on a Novell platform.

None

Application Development

X

Hardware

Software

Networking

X

Training

Other

Platform Type			Implementation Schedule											
Mainframe	Mid-Tier	PC	FY97	FY98	FY99	FY00	FY01							
	X													

PROJECT 2 — Reengineer IDMS mainframe applications to Oracle. DNRC plans to migrate the Trust Lands Management system and the Water Rights system to an Oracle database to take advantage of SQL ad hoc querying capabilities and to be able to offer inquiry access to the public through SummitNet and the Internet.

Oracle database access will be through Summit-Net with links to the Internet; also dial-in capability.

Application Development

X

Hardware

Software

Networking

Training

Other

Platform Type			Implementation Schedule											
Mainframe	Mid-Tier	PC	FY97	FY98	FY99	FY00	FY01							
	X													

PROJECT 3 — Distributed data processing using SummitNet. As SummitNet deploys, DNRC plans to offer distributed data processing to its field offices with their Hazard Reduction Agreement system. With SummitNet, DNRC hopes to provide on-line update and inquiry to those field offices.

Using SummitNet as the communications medium for distributed data processing.

Application Development

X

Hardware

Software

Networking

X

Training

Other

Platform Type			Implementation Schedule											
Mainframe	Mid-Tier	PC	FY97	FY98	FY99	FY00	FY01							
	X	X												

Project Description	Emerging Technology	Project Type
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A new Novell server will be required at the New York Store DNRC offices.	Perhaps some database software for development and access of migrated software systems.	None	1 (temporary; for a year or two)	None	No
Estimated Project Costs (in dollars)					
Hardware	Software	Contracted Services	FTEs	Assoc. Training	TOTAL
\$28,000	\$5,000	\$0	\$68,000	\$0	\$101,000

An Oracle server. May be able to use ISD's DEC Alpha server.	Oracle database and Oracle Forms for the user interface; HTML pkg. for home-page development.	Will require statewide access to these DNRC systems for both public and agency use.	None	None	Public on-line access to agency data through SummitNet/ Internet.
Estimated Project Costs (in dollars)					
Hardware	Software	Contracted Services	FTEs	Assoc. Training	TOTAL
\$0	\$0	\$1,000,000	\$0	\$0	\$1,000,000

SummitNet-access hardware in field offices where timber harvest management is applicable.	Oracle database for the system. Front-end soft-ware, at field offices, for data inquiry and update.	High-speed data communications between field offices and the Hazard Reduction host site.	None	None	No
Estimated Project Costs (in dollars)					
Hardware	Software	Contracted Services	FTEs	Assoc. Training	TOTAL
\$0	\$10,000	\$100,000	\$0	\$0	\$110,000

New Hardware	New Software	Telecommunication Impact	New FTEs	Statutory Changes	Allows Public Access?
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OFFICE OF PUBLIC INSTRUCTION (OPI)

PROJECT 1 — Assume the responsibility of maintaining and enhancing the MAEFAIRS system.

EDI; electronic forms on the METNET BBS.

Application Development

X

Hardware

Software

Networking

Training

Other

Platform Type

Implementation Schedule

Mainframe	Mid-Tier	PC	FY97	FY98	FY99	FY00	FY01
		X					

PROJECT 2 — Rewrite of federal accounting system.

Electronic forms for the METNET BBS; application links with systems to reduce required reporting by OPI.

Application Development

X

Hardware

Software

Networking

Training

Other

Platform Type

Implementation Schedule

Mainframe	Mid-Tier	PC	FY97	FY98	FY99	FY00	FY01
		X					

PROJECT 3 — Redesign of Codebook and implementation of programming standards and reusable code.

This project will aid in EDI between applications.

Application Development

X

Hardware

Software

Networking

Training

Other

Platform Type

Implementation Schedule

Mainframe	Mid-Tier	PC	FY97	FY98	FY99	FY00	FY01
		X					

Project Description	Emerging Technology	Project Type
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PROJECT 4 — Technology Assistance Program for Montana schools. As part of the School Improvement Program submitted to the 1997 Legislature, OPI has requested funds to provide Montana's K-12 schools with technology planning assistance plus assistance in the integration of technology into K-12 curriculum.

Increase access to METNET and expand person-to-person video systems in K-12 schools and univ.

Application Development

Hardware

Software

Networking

Training

Other

X

Platform Type			Implementation Schedule											
Mainframe	Mid-Tier	PC	FY97			FY98			FY99			FY00		
		X												

New Hardware	New Software	Telecommunication Impact	New FTEs	Statutory Changes	Allows Public Access?
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Already existing, in place, and functional.	The software will be developed by OPI staff.	Additional lines to METNET.	1 program -mer	May make MAE-FAIRS mandatory for district reporting.	MAEFAIRS info. will be put on METNET for electronic public access.
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Estimated Project Costs (in dollars)					
Hardware	Software	Contracted Services	FTEs	Assoc. Training	TOTAL
			\$189,500		\$189,500

N/A	The software will be the end result of this project.	This project should reduce the amount of data collected and disseminated.	None (Maybe a contractor)	N/A	Info. from this application will be put on METNET for elec. public access.
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Estimated Project Costs (in dollars)					
Hardware	Software	Contracted Services	FTEs	Assoc. Training	TOTAL
		\$195,000		\$25,000	\$220,000

Already existing, in place, and functional.	The software will be the end result of this project.	A new dataset will be created that will bridge automatically to the old datasets.	None (db administrator maybe)	N/A	Electronic version of the school directory would be provided on METNET.
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Estimated Project Costs (in dollars)					
Hardware	Software	Contracted Services	FTEs	Assoc. Training	TOTAL
	\$10,000	\$155,000	\$149,000	\$5,000	\$319,000

All systems run on standard Pentium PCs.	N/A. Existing systems are used.	Two standard voice-grade lines for METNET expansion.	2	N/A	Public access through the METNET system.
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Project Description	Emerging Technology	Project Type
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Estimated Project Costs (in dollars)					
Hardware	Software	Contracted Services	FTEs	Assoc. Training	TOTAL
\$76,000	\$14,000		\$140,000	\$20,000	\$290,000 ^G

^G This total includes \$40,000 for operating expenses.

New Hardware	New Software	Telecommunication Impact	New FTEs	Statutory Changes	Allows Public Access?
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DEPARTMENT OF PUBLIC HEALTH AND HUMAN SERVICES (DPHHS)

PROJECT 1 — EBT Implementation. DPHHS plans to implement an EBT process which will utilize smart card technology to deliver Food Stamp and WIC benefits. The goals are to streamline the benefit issuance and redemption procedures, improve security, and end the costs of producing and handling paper documents.

EBT

Application Development

X

Hardware

X

Software

X

Networking

X

Training

X

Other

Platform Type			Implementation Schedule											
Mainframe	Mid-Tier	PC	FY97	FY98	FY99	FY00	FY01							
X	X	X												

PROJECT 2 — Virtual Department. DPHHS plans to implement, through the use of Inter/Intranet enabled applications, a virtual department web site that will improve access to services and reduce the amount of time required to determine eligibility. Phase I of the project will include a pilot project.

Inter/Intranet

Application Development

X

Hardware

X

Software

X

Networking

X

Training

X

Other

Platform Type			Implementation Schedule											
Mainframe	Mid-Tier	PC	FY97	FY98	FY99	FY00	FY01							
X	X	X												

PROJECT 3 — Imaging. Begin the design of an Electronic Records Management and Imaging System to utilize state-of-the-art technology in redefining how DPHHS stores records and manages paperwork.

Imaging; document management.

Application Development

X

Hardware

X

Software

X

Networking

X

Training

X

Other

Platform Type			Implementation Schedule											
Mainframe	Mid-Tier	PC	FY97	FY98	FY99	FY00	FY01							
Unknown														

Project Description	Emerging Technology	Project Type
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N/A	N/A	N/A	N/A		
Estimated Project Costs (in dollars)					
Hardware	Software	Contracted Services	FTEs	Assoc. Training	TOTAL
					\$2,000,000 ^H

N/A	N/A	N/A	N/A		
Estimated Project Costs (in dollars)					
Hardware	Software	Contracted Services	FTEs	Assoc. Training	TOTAL

This project is in the planning stages. Hardware requirements have not been determined.	This project is in the planning stages. Software requirements have not been determined.	N/A	N/A		
Estimated Project Costs (in dollars)					
Hardware	Software	Contracted Services	FTEs	Assoc. Training	TOTAL

^H This total represents the implementation and pilot.

New Hardware	New Software	Telecommunication Impact	New FTEs	Statutory Changes	Allows Public Access?
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DEPARTMENT OF PUBLIC SERVICE REGULATION

PROJECT 1 — Expand telecommunications capabilities to improve public access to information. These capabilities may include the use of the Inter/Intranet systems.														Inter/Intranet	Application Development	X		
															Hardware			
															Software			
															Networking	X		
Platform Type			Implementation Schedule												Training			
Mainframe	Mid-Tier	PC	FY97	FY98	FY99	FY00	FY01										Other	
		X																

Project Description	Emerging Technology	Project Type
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Not yet determined.	Not yet determined.	Improved Internet connec-tivity (increased band-width) and more reliable connection to the Internet.	None	N/A	Public access to data now provided by direct staff contact or by mass mailings.
Estimated Project Costs (in dollars)					
Hardware	Software	Contracted Services	FTEs	Assoc. Training	TOTAL

New Hardware	New Software	Telecommunication Impact	New FTEs	Statutory Changes	Allows Public Access?
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DEPARTMENT OF REVENUE (DOR)

PROJECT 1 – Property Tax. This project is a modernization of the Property Tax System. An RFI has been submitted, and the results have been returned. The next phase will be to distribute an RFP, based on information obtained from the RFI, to acquire the necessary services.

Pen-based (data collection) systems.

Application Development

X

Hardware

Software

Networking

Training

Other

Platform Type

Implementation Schedule

Mainframe

Mid-Tier

PC

FY97

FY98

FY99

FY00

FY01

X

PROJECT 2 – UI/ DOR Project. DOR and Department of Labor have created a partnership whereby employer-related functions will be consolidated and streamlined within the two agencies, reducing the compliance burden on employers and resulting in savings of time and money.

Oracle client/server relational database; possibly imaging.

Application Development

X

Hardware

X

Software

X

Networking

Training

Other

Platform Type

Implementation Schedule

Mainframe

Mid-Tier

PC

FY97

FY98

FY99

FY00

FY01

X

X

PROJECT 3 – Centralized Revenue Processing and Information Center. Planning and implementation of an information processing center for revenue collection services.

Imaging; scanning; workflow; and client/server.

Application Development

X

Hardware

X

Software

X

Networking

Training

Other

Platform Type

Implementation Schedule

Mainframe

Mid-Tier

PC

FY97

FY98

FY99

FY00

FY01

X

X

Project Description	Emerging Technology	Project Type
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PROJECT 4 — Telefile Project. Provides an additional channel to receive data into DOR 's information processing systems by using the telephone. Data types include, but are not limited to, tax returns and payments.

Interactive Voice Response; Electronic Funds Transfer.

Application Development

X

Hardware

Software

Networking

Training

Other

Platform Type

Implementation Schedule

Mainframe

Mid-Tier

PC

FY97

FY98

FY99

FY00

FY01

X

New Hardware	New Software	Telecommunication Impact	New FTEs	Statutory Changes	Allows Public Access?
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Replacement of the AS400.	Project will be contracted; proposed software probably a client/server relational database.	Database may be distributed across all platforms. Pen-based data collection devices and client/server.	None	None	Inquiry for the public is provided by terminals located in county offices.
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Estimated Project Costs (in dollars)					
Hardware	Software	Contracted Services	FTEs	Assoc. Training	TOTAL
					\$4,047,000

If mainframe is used, ISD's System A would be required. If mid-tier, probably a mid-tier server.	Oracle relational database client/server.	Possible IVR. Database may be spread across platforms. If mid-tier, SummitNet involvement.		Will harmonize UI tax laws with OFLT and Withholding tax laws.	Unknown at this time.
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Estimated Project Costs (in dollars)					
Hardware	Software	Contracted Services	FTEs	Assoc. Training	TOTAL
					\$2,570,514

No.	No.	Yes, due to client/server.		Unknown.	Where possible.
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Estimated Project Costs (in dollars)					
Hardware	Software	Contracted Services	FTEs	Assoc. Training	TOTAL
					\$7,500,000

Hardware will be provided and kept at the vendor's site.	Vendor software that will allow the use of tele-phones for submission of short-form tax returns.	This is an interactive voice communication with the user.	None	None	Taxpayers will be filing their tax returns using the telephone.
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Estimated Project Costs (in dollars)					
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Project Description	Emerging Technology	Project Type
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Hardware	Software	Contracted Services	FTEs	Assoc. Training	TOTAL
		\$310,000			\$310,000

New Hardware	New Software	Telecommunication Impact	New FTEs	Statutory Changes	Allows Public Access?
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PROJECT 5 — Income Tax Redesign. DOR 's major information systems will be redesigned. Technologies such as imaging, workflow processes, and electronic commerce will be incorporated to meet future business needs.

EC, imaging, IVR, client/server database, scanning, and Internet.

Application Development

X

Hardware

X

Software

X

Networking

Training

Other

Platform Type			Implementation Schedule											
Mainframe	Mid-Tier	PC	FY97			FY98			FY99			FY00		
X	X													

Project Description	Emerging Technology	Project Type
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Mid-tier addition to mainframe.	Client/server database.	IVR for inquiry and also filing tax returns. Imaging for workflow over SummitNet.	None	None	None
Estimated Project Costs (in dollars)					
Hardware	Software	Contracted Services	FTEs	Assoc. Training	TOTAL
					\$9,915,000

New Hardware	New Software	Telecommunication Impact	New FTEs	Statutory Changes	Allows Public Access?
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SECRETARY OF STATE

PROJECT 1 — Integrate existing and new election data and information services into a Voter Information Services Assistance Program component of the client/ server OPPEN system. Includes consideration of adding GIS capabilities and the use of Internet, etc., to increase public access to data and services.

Internet; GIS, desktop mapping; imaging?; voice/ data integration?; doc. man.; dial-in LAN access.

Application Development

X

Hardware

?

Software

?

Networking

Training

Other

Platform Type

Implementation Schedule

Mainframe

Mid-Tier

PC

FY97

FY98

FY99

FY00

FY01

X

X

PROJECT 2 — Complete the development of the accounts receivable and payment-tracking functions of the client/server OPPEN system to incorporate additional management services and audit requirements.

Not known until further analysis and planning are completed.

Application Development

X

Hardware

Software

Networking

Training

Other

Platform Type

Implementation Schedule

Mainframe

Mid-Tier

PC

FY97

FY98

FY99

FY00

FY01

X

PROJECT 3 — Reengineer the current hardcopy-based process for submitting, reviewing, updating, and publishing the Montana Administrative Register (MAR) and Administrative Rules of Montana (ARM). The foundation of the process is expected to be a text database and may include imaging capabilities.

Not known until further analysis and planning are completed.

Application Development

X

Hardware

?

Software

?

Networking

Training

Other

Platform Type

Implementation Schedule

Mainframe

Mid-Tier

PC

FY97

FY98

FY99

FY00

FY01

X

?

Project Description	Emerging Technology	Project Type
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<p>PROJECT 4 – Complete the requirements analysis for the Corporations component of the client/server OPPEN system. Either begin systems development of the OPPEN/Corporations subsystem or modify the existing mainframe Corporations system to meet year 2000 compliance.</p>										Not known until further analysis and planning are completed.	Application Development	X
											Hardware	
											Software	
											Networking	
											Training	
Platform Type			Implementation Schedule								Other	
Mainframe	Mid-Tier	PC	FY97	FY98	FY99	FY00	FY01					
	X											

New Hardware	New Software	Telecommunication Impact	New FTEs	Statutory Changes	Allows Public Access?
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Not known until further analysis and planning are completed.	Not known until further analysis and planning are completed.	Not known until further analysis and planning are completed.	None	Election, voter reg., and dist. apportionment are being reviewed.	Public access may be provided through the Internet.
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Estimated Project Costs (in dollars)					
Hardware	Software	Contracted Services	FTEs	Assoc. Training	TOTAL
					Unknown

Not known until further analysis and planning are completed.	Not known until further analysis and planning are completed.	Not known until further analysis and planning are completed.	None	Not known until further analysis and planning are completed.	Not known until further analysis and planning are completed.
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Estimated Project Costs (in dollars)					
Hardware	Software	Contracted Services	FTEs	Assoc. Training	TOTAL
					Unknown

Not known until further analysis and planning are completed.	Not known until further analysis and planning are completed.	Not known until further analysis and planning are completed.	None	Not known until further analysis and planning are completed.	Not known until further analysis and planning are completed.
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Estimated Project Costs (in dollars)					
Hardware	Software	Contracted Services	FTEs	Assoc. Training	TOTAL
					Unknown

Not known until further analysis and planning are completed.	Not known until further analysis and planning are completed.	Not known until further analysis and planning are completed.	None	Not known until further analysis and planning are completed.	Not known until further analysis and planning are completed.
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Estimated Project Costs (in dollars)					
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Project Description	Emerging Technology	Project Type
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Hardware	Software	Contracted Services	FTEs	Assoc. Training	TOTAL
					Unknown

New Hardware	New Software	Telecommunication Impact	New FTEs	Statutory Changes	Allows Public Access?
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MONTANA STATE LIBRARY

PROJECT 1 — Purchase of automated system modules for Montana Talking Books Program, enabling this system to be integrated into the existing networked environment in this program of the State Library.

Potentially, patrons will be able to request materials on-line via the Internet.

Application Development	
Hardware	
Software	X
Networking	
Training	
Other	

Platform Type			Implementation Schedule											
Mainframe	Mid-Tier	PC	FY97	FY98	FY99	FY00	FY01							
		X												

PROJECT 2 — Integration of CD-ROM tower and integration of associated CD products into LAN/Novell 4.x environment in Statewide Library Resources.

Potentially, patrons will be able to request materials on-line via the Internet.

Application Development	
Hardware	X
Software	X
Networking	X
Training	
Other	

Platform Type			Implementation Schedule											
Mainframe	Mid-Tier	PC	FY97	FY98	FY99	FY00	FY01							
	X	X												

PROJECT 3 — Proposal of Statewide Licensure of electronic full-text periodical databases for Montana Libraries, plus public, school, academic, and agency libraries, using the networked infrastructure currently being put into place.

Patrons and libraries will be able to access materials on-line via the Internet.

Application Development	
Hardware	
Software	
Networking	X
Training	
Other	

Platform Type			Implementation Schedule											
Mainframe	Mid-Tier	PC	FY97	FY98	FY99	FY00	FY01							
	X	X												

Project Description	Emerging Technology	Project Type
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PROJECT 4 – Integration of Internet access to Statewide Library Resources automated online catalog via the State Library Web page.

Patrons will be able to access the Library catalog via WWW browsers.

Application Development

Hardware

X

Software

X

Networking

X

Training

Other

Platform Type			Implementation Schedule																	
Mainframe	Mid-Tier	PC	FY97				FY98				FY99				FY00				FY01	
	X	X																		

New Hardware	New Software	Telecommunication Impact	New FTEs	Statutory Changes	Allows Public Access?
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Additional memory and disk space for current server.	Unknown at this time.	Potentially, patrons will be able to request materials on-line via the Internet.	None	None	Patrons will be able to request materials on-line via the Internet.
Estimated Project Costs (in dollars)					
Hardware	Software	Contracted Services	FTEs	Assoc. Training	TOTAL

CD-ROM server and towers.	Unknown at this time.	Potentially, patrons will be able to request materials on-line via the Internet.	None	None	Patrons will be able to request materials on-line via the Internet.
Estimated Project Costs (in dollars)					
Hardware	Software	Contracted Services	FTEs	Assoc. Training	TOTAL

None	None	Patrons and libraries will be able to access the materials on-line via the Internet.	None	None	Patrons and libraries will be able to access materials on-line via the Internet.
Estimated Project Costs (in dollars)					
Hardware	Software	Contracted Services	FTEs	Assoc. Training	TOTAL

Additional memory and disk space for Library Automation System server.	Software to maintain the public access catalog in an HTML format.	Patrons will be able to access the Library catalog via WWW browsers.	None	None	Patrons will be able to access the Library catalog via WWW browsers.
Estimated Project Costs (in dollars)					
Hardware	Software	Contracted Services	FTEs	Assoc. Training	TOTAL

Project Description	Emerging Technology	Project Type
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New Hardware	New Software	Telecommunication Impact	New FTEs	Statutory Changes	Allows Public Access?
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DEPARTMENT OF TRANSPORTATION (MDT)

PROJECT 1 — Move MDT's roadway imaging system into full production and integrate it with departmental GIS and TIS systems.

Imaging — digital images integrated with GPS and field data collection.

Application Development

X

Hardware

Software

Networking

Training

Other

Platform Type

Implementation Schedule

Mainframe	Mid-Tier	PC	FY97	FY98	FY99	FY00	FY01
	X	X					

PROJECT 2 — Network all weigh stations through SummitNet, in cooperation with Lockheed Corp. Also, set the direction for integrating all Maintenance section houses into a wide-area network.

EDI; motor carrier weigh-in-motion; data warehousing; and additional IV/HS, such as AVC.

Application Development

X

Hardware

X

Software

X

Networking

X

Training

X

Other

Platform Type

Implementation Schedule

Mainframe	Mid-Tier	PC	FY97	FY98	FY99	FY00	FY01
X	X	X					

PROJECT 3 — Explore opportunities to use electronic data interchange (EDI), electronic funds transfer (EFT), telefiling, and other electronic services. Expand MDT's use of the Internet for such things as processing contractor-bid-letting materials and other electronic commerce; providing access to MDT information; etc.

EDI; EFT; Telefiling; Internet.

Application Development

X

Hardware

Software

Networking

Training

Other

Platform Type

Implementation Schedule

Mainframe	Mid-Tier	PC	FY97	FY98	FY99	FY00	FY01
	X	X					

Project Description	Emerging Technology	Project Type
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<u>PROJECT 4</u> — Acquire an Aerial Survey Control Tool (ASCOT) or related product and integrate to MDT's aerial mapping. ASCOT is a GPS supported navigation and positioning tool that reduces the number of ground control points for mapping a project.										ASCOT	Application Development	X
											Hardware	
											Software	
											Networking	
											Training	
Platform Type			Implementation Schedule								Other	
Mainframe	Mid-Tier	PC	FY97	FY98	FY99	FY00	FY01					
		X										

New Hardware	New Software	Telecommunication Impact	New FTEs	Statutory Changes	Allows Public Access?
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Digital Alpha 2100 server; clients are Pentium PCs.	Oracle Database Oracle Developer 2000 ARCinfo Arcview 3	Using SummitNet and Internet.	None	N/A	Ultimately hope to offer public access to this information via the Internet.
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Estimated Project Costs (in dollars)					
Hardware	Software	Contracted Services	FTEs	Assoc. Training	TOTAL
N/A	\$40,000	\$75,000	\$0	Internal	\$115,000

An international system using many technologies is being developed.	UNIX, NT, MVS, VMS, OS400, etc.	Using SummitNet and Internet plus AAMVAnet.	None	N/A	N/A
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Estimated Project Costs (in dollars)					
Hardware	Software	Contracted Services	FTEs	Assoc. Training	TOTAL
\$500,000	\$200,000	\$1,600,000	\$80,000	\$40,000	\$2,420,000

Servers will be used; additional storage space will be procured. Gateway hardware & provider connections.	Web servers in Oracle. Gateway software for EDI/EFT.	Internet. EDI/EFT standards.	None	Work within the current law re-garding electronic signatures, etc.	Through use of the Internet server, with integration to database systems.
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Estimated Project Costs (in dollars)					
Hardware	Software	Contracted Services	FTEs	Assoc. Training	TOTAL
	\$80,000	\$200,000	\$0	\$20,000	\$300,000

PC, GPS receiver, navigation screen.	Flight planning software, navigation software, GPS post referencing software.	N/A	None	N/A	N/A
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Estimated Project Costs (in dollars)					
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Project Description	Emerging Technology	Project Type
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Hardware	Software	Contracted Services	FTEs	Assoc. Training	TOTAL
\$20,000	\$30,000		\$0	Inc. in other costs.	\$50,000

New Hardware	New Software	Telecommunication Impact	New FTEs	Statutory Changes	Allows Public Access?
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<i>PROJECT 5</i> — Continue the development of the ISTE Management Systems and their integration with TIS.										Imaging and GIS integration.	Application Development	X
											Hardware	
											Software	
											Networking	
											Training	
Platform Type			Implementation Schedule								Other	
Mainframe	Mid-Tier	PC	FY97	FY98	FY99	FY00	FY01					
	X	X										

Project Description	Emerging Technology	Project Type
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Increase server capacity.	Oracle based.	Replicate data servers between Headquarters and district/area offices.	None	N/A	N/A
Estimated Project Costs (in dollars)					
Hardware	Software	Contracted Services	FTEs	Assoc. Training	TOTAL
\$100,000	\$40,000	\$400,000	\$0	\$40,000	\$580,000

New Hardware	New Software	Telecommunication Impact	New FTEs	Statutory Changes	Allows Public Access?
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MONTANA STATE UNIVERSITY (MSU)

PROJECT 1 — Replace current Bozeman administrative information systems or migrate those systems to a Unix based, client/server based platform; seek a system that would provide a common platform for the MSU system.

Client/server system implementation; work-flow management; business process re-engineering.

Application Development

X

Hardware

X

Software

X

Networking

Training

Other

Platform Type

Implementation Schedule

Mainframe

Mid-Tier

PC

FY97

FY98

FY99

FY00

FY01

X

X

PROJECT 2 — Implement a campus ATM network backbone and convert clients to ATM-based data network system on the basis of need for either speed of connection or need for greater functionality (e.g., voice+data+video connectivity at the desktop PC).

ATM communications technologies; LANE protocols for LAN emulation over ATM; distance learning; voice/data/video integration and whiteboard interactions.

Application Development

Hardware

X

Software

X

Networking

X

Training

X

Other

Platform Type

Implementation Schedule

Mainframe

Mid-Tier

PC

FY97

FY98

FY99

FY00

FY01

Project Description	Emerging Technology	Project Type
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<u>PROJECT 3</u> — Replace the current library automation system with a modern system.														Likely client/server-based system; enhanced support for distance learning; imaging and document management (full-text databases).														Application Development														
																												Hardware														X
																												Software														X
																												Networking														
Training														X																												
Other																																										
Platform Type						Implementation Schedule																																				
Mainframe		Mid-Tier		PC		FY97		FY98		FY99		FY00		FY01																												
	X	X																																								

PROJECT 4 — Provide an integrated suite of services for clients' desktop computer systems: file/print service, standardized e-mail system, calendar scheduling system, etc.														Client/server systems; document management; EDI.														Application Development																											
																												Hardware														X													
																												Software														X													
																												Networking																											
Training														X																																									
Other																																																							
Platform Type						Implementation Schedule																																																	
Mainframe			Mid-Tier			PC			FY97		FY98			FY99			FY00			FY01																																			
			X			X																																																	

New Hardware	New Software	Telecommunication Impact	New FTEs	Statutory Changes	Allows Public Access?
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Mid-tier Unix systems; PC clients are likely already in place; networking system is in place.	Yet to be determined.	None identified.	Unknown but no long-term increase.	None apparent.	Most systems would not be public accessible because of privacy regulations.
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Estimated Project Costs (in dollars)					
Hardware	Software	Contracted Services	FTEs	Assoc. Training	TOTAL
					Unknown

Not yet determined.	Not yet determined.	Would benefit from state-wide adoption of ATM telephone com. systems and from ATM-based Internet connection.	No ongoing impact.	None yet identified.	Develops the on-campus infrastructure in anticipation of wide-spread availability state-wide.
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Estimated Project Costs (in dollars)					
Hardware	Software	Contracted Services	FTEs	Assoc. Training	TOTAL
					Unknown

Not yet determined.	Not yet determined.	None identified.	No ongoing impact.	None	Providing enhanced public access is key to the success of this project.
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Estimated Project Costs (in dollars)					
Hardware	Software	Contracted Services	FTEs	Assoc. Training	TOTAL
					Unknown

Project Description	Emerging Technology	Project Type
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Not yet determined; likely to be mid-tier equipment capable of running Unix or Windows NT.	Unknown; likely use of Microsoft Exchange, a variety of e-mail clients, Microsoft Scheduler Plus for calendaring, etc.	None	None	None	N/A
Estimated Project Costs (in dollars)					
Hardware	Software	Contracted Services	FTEs	Assoc. Training	TOTAL
					Unknown

New Hardware	New Software	Telecommunication Impact	New FTEs	Statutory Changes	Allows Public Access?
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PROJECT 5 — Work with faculty and students to develop a community understanding of the level of student access to and use of technology tools and then support the implementation of the resulting plans.

Possible: imaging, doc. management, wireless LANs, mobile computing, multi-media, voice/data/video integration, distance learning, dial-in access.

Application Development	
Hardware	X
Software	X
Networking	X
Training	X
Other	

Platform Type			Implementation Schedule																			
Mainframe	Mid-Tier	PC	FY97				FY98				FY99				FY00				FY01			
		X																				

Project Description	Emerging Technology	Project Type
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Too early to specify.	Too early to specify.	Too early to specify.	Too early to specify.	None identified.	N/A
Estimated Project Costs (in dollars)					
Hardware	Software	Contracted Services	FTEs	Assoc. Training	TOTAL
					Unknown

